WHAT IS CLAIMED IS:

1. A low profile, fine mist, finger-operated, precompression-type spray pump for the nebulization of fluids, comprising:

a closure holding a pump securely to the neck of a container;

a housing guiding the flow of a fluid to be sprayed, said housing being constructed as a multi-step structure, with the diameter thereof reducing downwardly by steps;

a piston being moveable in both upward and downward directions within the housing, said piston being provided with a vertical duct penetrating therethrough;

a poppet valve closing and opening the vertical duct of the piston with a rod, said poppet valve being provided with the rod at the upper portion thereof and a cylindrical extending part at the lower portion thereof;

a spring providing an upward returning force to the poppet valve;

a push button being engaged to the top of the piston, said push button being provided with a nozzle at its lateral portion, said nozzle communicating with the vertical duct; and

a second valve closing a housing bottom entrance with a glans part in compression mode and opening it in release mode, said second valve being disposed between the poppet valve and the housing bottom entrance, in which said second valve is provided with a cylindrical body being moveable coaxially within the cylindrical extending part of the poppet valve and the glans part having a larger diameter than the cylindrical body part, said glans part being positioned at the lower portion of the cylindrical body part.

2. The spray pump according to claim 1, wherein the top of the housing bottom entrance is formed to be concave in shape, and the bottom of the glans part of the second valve is formed to be convex in shape, enabling them to come into close contact with each other.

3. The spray pump according to claim 1, wherein a plurality of teeth are circumferentially formed on the outer surface of glans part of the second valve, and a plurality of grooves conformable to the teeth are circumferentially formed on the inner surface of the housing in proximity to the housing bottom entrance, and when the teeth are engaged to the grooves, a plurality of through passages are created between them.

4. The spray pump according to claim 1, wherein an annular protuberance is formed on the outer surface of cylindrical body of the second valve and/or the inner surface of cylindrical extending part of the poppet valve at the position where the cylindrical body is in sliding contact with the cylindrical extending part, resulting in an improved sealing effect.

5. The spray pump according to claim 1, wherein a pair of small lugs are formed on the outer surface of the body of the second valve at the height where the bottom of the extending part of the poppet valve is positioned immediately after spraying.